

I. Summary of Project

The 1:1 laptop project will allow us to create differentiated lessons to meet the needs of the individual learners. Students will be able to explore various subjects in an engaging way that would not be possible without a 1:1 program. Students will be able to use a medium of high interest and will motivate students to improve their understanding of the second grade Indiana Core Academic Standards.

The PL 221 plan focuses on increasing students' achievement in reading, writing and math. The 1:1 laptop program will provide an engaging learning tool for students at the critical stage in their education, as they move out of the learning-to-read phase of their education and into the reading-to-learn phase.

Students, parents and teachers will be able to take virtual fieldtrips to build background knowledge, which research has shown to increase academic achievement. Most importantly, the program will allow teachers to differentiate instruction based upon students' individual learning needs.

Reading Goal: Students will improve reading fluency, comprehension and word attack skills by exploring science and social studies topics.

Objective: 75% of the second grade students will meet or exceed their reading benchmark (including ENL benchmarks) by the end of the school year.

Writing Goal: Students will improve knowledge of high frequency words, sentence structure and organization of a writing piece.

Objective 2: 75% of 2nd graders will be able to write 24 out of 30 high frequency words each nine weeks.

Math Goal: Students will become more proficient in basic math facts and gain a better understanding of mathematical relationships.

Objective: 75% of 2nd grade students will master their number combinations through 20.

Goal 1 solution: Students will use laptops for number study practice as homework/tutorial by using Tux Math or similar program or type out number combinations. Students will use spreadsheets to improve their number sense and understanding of science and social studies data by organizing data, creating a variety of charts and graphs from that data, and explaining the information to the class and to their parents. The ability to easily manipulate the data will also increase students' understanding of the relationship among numbers. Number sense will also be developed through websites such from the National Library of Virtual Manipulatives.

Goal 2 solution: Students will use the laptop to create sentences or stories using the high frequency words. They will also use Tux Paint to create pictures as a memory aid that represents high frequency words that are more difficult.

Goal 3 solution: Students will use a variety of interactive sites devoted to reading and reading strategies. Teachers have access to Thinkfinity.org resources and activities, Into

the Book, National Geographic etc. Websites such as readprint.com, magickeys.com and google books provide online books for children to read. Some works can also be downloaded to the computer. Text-to-speech software will allow students to hear the stories read to them. This would be another way to partner with parents at home, particularly with the parents of our ENL students who may not be able to help their children read English.

We will evaluate the program in several ways, along with any documentation that the IDOE requires. We will document the number of times students take the computers home, follow-up questionnaire for parents on the use of the computer at home, student achievement growth in the core areas, and the upkeep costs associated with the program. Goshen Community Schools' quarterly writing assessments will assist in evaluating the writing component. Student, parent, and teacher feedback will provide data to adjust and improve our focus throughout the project.

II. Remediation Support

There will be a variety of offline activities for take-home activities using Tux paint to make illustrations for books and to create non-linguistic representations for vocabulary terms. Tux Math for math remediation and tutorial, Star Office to type stories etc. Students will keep a journal and use high frequency words as they write. We will use the laptops during tutorial / enrichment time to help us differentiate instruction and help meet the needs of the individual students. Those activities will then be extended to a take-home activity.

To increase reading comprehension, teachers will access websites such as www.abcteach.com/directory/reading_comprehension which include stories followed by comprehension questions. These can be downloaded to student computers as PDF files, based on students' individual reading levels. At home students will read these stories and answer the questions. Answer keys are available online, which will be provided to parents to help them feel more confident in helping their children learn at home.

Using the www.ixl.com/math/practice/ website, students will practice the targeted skills they need to improve. When internet access is not available, students can use digital worksheets to practice their math facts to build computation skills.

Math Trailblazers® is the Goshen Community Schools adopted curriculum. Parents can access supporting documents for the program that will allow them to interact and support their child in his/her math education. This information can also be sent home with parents who need it in print form.

Goshen Community Schools already has a Moodle server. Teachers participating in this program will create a class Moodle page. Teachers will continue sending take-home instructions each week for parents who do not have access to Internet at home. When students take the laptop home, there will be detailed directions on what the student needs to do and how the parent can help the student. Assignment information will be sent home with students for each take-home assignment, including directions for completion, expectations for students, and suggestions for how parents can help at home.

Prior to the start of the laptop program, there will be an evening parent introduction meeting. The program will be explained along with how the laptops will be used. Parents will be given directions (in both English and Spanish) on how to access Moodle. A month later, there will be a follow up meeting where parents can ask questions and get more information on how the laptops are used in the classroom. If needed, there will be additional meetings to help the parents with the laptop functions and provide additional support on how to use specific programs.

In addition, parents will have access to video tutorials on how to use the software as the tutorials are developed. Tutorials will be created using Wink, a Linux based program to create software tutorials and it is freeware.

Computer Capers are home/school activities that reinforce Indiana Academic Standards using computers. Teachers will pick a “caper” that ties into the instruction for that day or week and have students/parents work on it at home. Thinkfinity.org provides a wealth of educational and literacy resources that students and parents can use that will also reinforce school instruction. Teachers will create activities that will reinforce the high frequency words. Students will take home specific activities that they will complete with their parent at home to increase student achievement and engagement. Activities using TuxPaint, TuxMath, TuxWordsmith and StarOffice Writer will extend the learning from school to home.

Because some of our students do not have access to the Internet at home, most of the take-home activities will be off-line. A parent survey will be given to determine the number of students who do not have access and plan accordingly. Parents and students will use.

III. Professional Development

The 1:1 technology coach will provide professional development activities and resources for the 2nd grade 1:1 laptop teachers. The coach will assist the teachers as needed. These resources include best practices for implementing a 1:1 program in an elementary setting.

Teachers in the laptop program will read articles relating to best practices and engage in discussion with other participating 1:1 schools and classrooms. Teachers selected for this project have strong classroom management skills and are willing to adapt to meet the challenges inherent to a 1:1 classroom.

Teachers will meet with the school technology resource coordinator and with the 1:1 technology coach from GHS to discuss best practices in how to integrate technology literacy into the curriculum. Students will be taught procedures on how to correctly care for and maintain their computer.

Teachers will be given curriculum time to investigate and develop project-based assignments that can be integrated with the student laptops. Professional resources and examples of best practices will be provided by the 1:1 technology coach.

- November / December 2008 – Meet with 1:1 technology coach from GHS.
Use additional curriculum work time (minimum of 6 hours) to create interactive, project based lessons to address the project goals.
- January – May 2009 – Meet at least once a week with laptop cohort professional learning community to discuss issues and needs
Join Moodle course on teaching in a 1:1 2nd grade classroom sponsored by the 1:1 technology coach from GHS.
Some topics to be covered include (not necessarily in this order)
- Using Moodle with a 2nd grade class
 - Thinkfinity.org resources for teachers, parents and students
 - Integrating the use of Tux Paint into the curriculum
 - Using Tux Math for remediation and enrichment
 - Using Tux Wordsmith for remediation and enrichment
 - Star Office activities for 2nd graders
 - Into the Book reading strategies for remediation
- June / August- Complete summer curriculum work to expand and develop new 1:1 teaching strategies and explore new ways to use the computer in the classroom.
- September – Implement new strategies learned over the past 10 months.
Continue meeting once a week with the laptop cohort PLC.
Continue to revisit the 2nd grade 1:1 Moodle course for new ideas.
- October – Evaluate new strategies implemented at the beginning of the year with the 1:1 coach and adjust as necessary.
- Nov/Dec- Start examining more advanced ways to integrate technology such as podcasts, video creation.

IV. Administrative Commitment and Support

As the principal of Model Elementary, I will assist in implementation of the program. I will take training with the classroom teachers and help in organizing the parent information evening. I will follow-up if a student is having difficulty in returning computer at designated intervals. I will also aid in keeping data of student's use of programs and student achievement.

V. Technology Commitment and Support

I am writing this to confirm that Goshen Community Schools intends to support the grant by providing the proper wireless access to the second grade classrooms that will participate in the grant in order to effectively participate in this program. The district will also provide the appropriate connections for students and teachers to remotely access the needed files.

In addition, the following district level technology staff will support this program:

David Snyder, Network Coordinator, Andrew Jeeves, Network Technician

David Stuart, Technology Associate, Dan Wolfe, Web Access Coordinator.

Thank you for your consideration regarding the participation of Goshen Community Schools in this project. Feel free to contact me if I may be of further assistance.

Sincerely, Dr. Diane Woodworth, Assistant Superintendent